

PLATFORM LINK WRIST MECHANISM

ABSTRACT OF THE DISCLOSURE

The present invention provides a robotic surgical tool for use in a robotic surgical system to perform a surgical operation. The robotic surgical tool includes a wrist mechanism disposed near the distal end of a shaft which connects with an end effector. The wrist mechanism includes a distal member configured to support the end effector, and a plurality of rods extending generally along an axial direction within the shaft and movable generally along this axial direction to adjust the orientation of the distal member with respect to the shaft. Advancement or retraction of a first rod generally along the axial direction tips the base through a first angle. The addition of a second angle allows the distal member to direct the end effector in essentially a compound angle. The robotic surgical tool may also include provisions for roll movement.

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